

## REMARKS

The Examiner has rejected claims 1-8 and 13-14 under 35 U.S.C. §102(b) as purportedly being anticipated by Herman et al., U.S. Patent No. 5,364,272. The Examiner has further rejected claims 9-12 as purportedly being unpatentable over Herman et al. in view of Lewis, U.S. Pat. No. 2,909,868. Applicant respectfully traverses each of the above-identified bases for rejection.

Applicant respectfully traverses the Examiner's basis for rejection of claims 1-8 and 13-14 under 35 U.S.C. §102(b), as purportedly being anticipated by Herman et al. Applicant respectfully submits that the cited Herman et al. reference should be deemed incapable of teaching or suggesting the patentably distinguishing structure and mode of operation of Applicant's invention of independent claims 1 and 13, and that claims 1-8 and 13-14 should be deemed patentable thereover.

The Herman et al. reference discloses a teaching toy which includes at least one receptacle 12. A set of conductive pads 46 is located at an inner face of each receptacle 12. The teaching toy also includes a plurality of remote units 14, which in the preferred embodiment take the form of cubes. A set of conductive pads 50 is located at a face of each cube 14. Separating pads 46 and 50 is a dielectric made from two dielectric layers 48 (associated with the receptacle 12) and 52 (associated with the cube 14). Layers 48 and 52 seal pads 46 and 50 from the external environment (Col. 2, lines 43-64).

Applicant respectfully submits that independent claims 1 and 13 patentably distinguish over the Herman et al. reference. Claims 1 and 13 require that each of the objects include a plurality of electrically conductive object contact elements, wherein at

least two of the object contact elements come into electrical contact with at least two member contact elements when an object is placed into physical contact with the identification member. In contrast, Herman et al. fails to even remotely teach or suggest the formation of an electrical contact between conductive pads 46 and 50. To the contrary, pads 46 and 50 are specifically disclosed as being separated by a dielectric made from two dielectric layers (Col. 2, lines 60-61).

Thus, contrary to the Examiner's representations, receptacle (identification member) conductive pads 46 never come into electrical contact with any of cube (object member) conductive pads 50. Rather, the Herman et al. apparatus utilizes capacitive coupling between code-in pads 46 and code-out pads 50 to form capacitors 18 (Col. 4, lines 18-23). The capacitive coupling allows a control signal and a data signal to be transmitted from cube 14 to receptacle 12, thereby permitting processor 20 to determine the identity of a datum associated with cube 14 (Col. 4, lines 49-58). At no point does an electrical current ever pass between the conductive pads 46 and 50. Indeed, it is impossible for an electrical current to pass between the conductive pads 46 and 50, in view of the fact that they are separated by a dielectric layer.

Simply put, the Herman et al. reference teaches the utilization of capacitive coupling between cube 14 and receptacle 12 to identify a particular datum associated with cube 14. That reference does not teach or suggest the identification of an object by passing an electrical current between that object and an identification member—as is the case with Applicant's invention of claims 1 and 13. Accordingly, reconsideration and withdrawal of the rejection of claims 1 and 13, based on Herman et al., are respectfully solicited.

Applicant likewise respectfully traverses the Examiner's basis for rejection of claims 9-12 under 35 U.S.C. §103(a) as purportedly being unpatentable over Herman et al. in view of Lewis. Specifically, Applicant respectfully traverses the Examiner's combination of the respective references. Two or more references may not be combined to support an assertion of obviousness of a claimed invention, absent some teaching or suggestion to their combination. Further, two or more references may not properly be combined if to do so would serve to frustrate the functions, goals or purposes of one or both of the respective references.

Applicant respectfully submits that the cited combination of references should be deemed incapable of teaching or suggesting the patentably distinguishing structure and mode of operation of Applicant's invention of claims 9-12, and that those claims should be deemed patentable thereover. Not only is there no suggestion to combine these references, but in fact the cited references teach away from each other, and from Applicant's claimed invention.

The Lewis reference teaches an animated toy in the form of a fish, which includes a motor 10 connected to a series of shafts, which operate to move tail portion 23 from side to side in a reciprocating fashion, simulating the movements of the tail of a fish in moving through a body of water. The motor 10 is connected to batteries 9, through wires 24, 25 and 26 which provide a circuit between the batteries and the motor. The wires 25 and 26 extend to a point adjacent to the mouth of the fish and are disposed adjacent to a magnetic block 29, secured at the front end of the body. A fishing pole 30 supports a fishing line 31 which carries a permanent magnet 32 at its end. In operation of the device, the magnet 32 engages the ends of the wires 25 and

26 to complete a circuit to the motor 10, causing the motor to operate the shafts and thereby causing the tail portion 23 to swing laterally (Col. 1, line 69 – Col. 2, line 53). Notably, however, Lewis does not even remotely disclose a toy which is capable of identifying an object to the exclusion of other like objects.

Applicant respectfully submits that the Examiner's combination of the Herman et al. and Lewis references should be deemed inappropriate, in the complete absence of any teaching in either reference to such a combination. Indeed, their combination only serves to frustrate their respective goals and purposes. These references specifically and affirmatively teach away from their combination, and so cannot be deemed to teach or make obvious the invention of Applicants' claims 9-12. Combining the cited references in an attempt to reconstruct Applicant's invention, with benefit of the hindsight afforded by Applicant's own disclosure, deviates from the teachings of each of these cited references.

Specifically, Herman et al. discloses an electronic toy in which a datum associated with an object is identified by means of capacitive coupling between conductive pads associated with each of the object and a receptacle. At no time does an electric current ever pass between the object and the receptacle. Indeed, passage of such a current between the object and the receptacle is simply not possible, as the respective conductive pads associated with the object and the receptacle are separated by a dielectric layer, to protect them from the external environment. In contrast, Lewis discloses a toy in which a magnet associated with a fishing rod member, which magnet is not protected from the external environment, is adapted to come into contact with a pair of wires disposed at the front end of a fish member, which wires are likewise not

protected from the external environment, to complete an electrical circuit within the fish member, thereby powering a motor located within the fish member.

There is no teaching or suggestion in the Lewis reference of a dielectric layer being provided between the magnet and the wires associated with the electrical circuit within the fish member, to protect the magnet and the wires from the external environment. Indeed, such a structure would frustrate the goals and purposes of the Lewis reference, which require that the magnet come into direct electrical contact with each of the wires, to complete an electrical circuit and thereby provide power to the motor (Col. 2, lines 47-53). Likewise, there is no teaching or suggestion in the Herman et al. reference of providing an object and a receptacle with conductive pads which come into direct electrical contact with one another. Such a structure would similarly frustrate the goals and purposes of the Herman et al. reference, which require sealing of the conductive pads from the external environment to prevent them from becoming worn or dirty (Col. 2, lines 62-64). Indeed, it is clear that combining the two references as suggested by the Examiner would frustrate the goals and purposes of both. Accordingly, Applicant respectfully traverses the Examiner's combination of these references.

Notwithstanding the foregoing, Applicant respectfully submits that even if Herman et al. could properly be combined with Lewis, the resulting combination still would not teach or suggest the patentably distinguishable structure and mode of operation of Applicant's invention of claims 9-12. Specifically, such a combination would neither teach nor suggest an educational toy comprising a plurality of objects, each including a plurality of object contact elements, wherein two or more object contact elements are

connected to one another to form a contact pattern, and an identification member including a plurality of member contact elements configured such that at least two member contact elements come into electrical contact with at least two object contact elements. Indeed, neither of the Herman et al. and Lewis references even remotely teaches or suggests a device in which an object is identified by means of an electrical current passing through that object. Accordingly, Applicant respectfully submits that its claims 9-12 patentably distinguish over the cited combination of references. Therefore, reconsideration and withdrawal of the rejection of claims 9-12, and allowance thereof, are respectfully solicited.

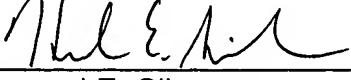
Inasmuch as dependent claims 2-8, 10-12 and 14 merely serve to further define the subject matter of independent claims 1, 9 and 13, respectively, which themselves should be deemed allowable, reconsideration and withdrawal of the rejection of those claims based on the references cited by the Examiner, and allowance thereof, are respectfully requested.

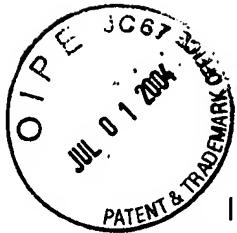
Applicant respectfully submits that the application as a whole is now in a *prima facie* condition for allowance at this time. Therefore, reconsideration of the application, and allowance of claims 1-14, are respectfully solicited.

Should anything further be required, a telephone call to the undersigned at (312) 456-8400 is respectfully requested.

Respectfully submitted,

Dated: June 25, 2004

  
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Howard E. Silverman  
One of Attorneys for Applicant



CERTIFICATE OF MAILING

I hereby certify that this AMENDMENT AND COMMUNICATION is being deposited with the United States Postal Service as First Class Mail under 37 C.F.R. §1.8, postage prepaid, in an envelope addressed to: Mail Stop Non-Fee Amendment, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on the date set forth below.

Dated: June 25, 2004

  
Howard E. Silverman

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